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AMENDMENTS

Please amend the claims as follows:

1. (original) A method for stabilizing an image plane in medical imaging, the method comprising:
 - (a) tracking motion within a region; and
 - (b) automatically altering an acquisition scan plane position relative to a transducer as a function of the motion.
2. (original) The method of Claim 1 wherein (a) comprises performing one of a cross-correlation and a sum of absolute differences.
3. (original) The method of Claim 1 wherein (a) comprises comparing data from a first acquisition with data from a second acquisition.
4. (original) The method of Claim 1 wherein (b) comprises translating and rotating an acquisition scan plane to the acquisition scan plane position.
5. (original) The method of Claim 1 further comprising:
 - (c) scanning the region with ultrasound energy;
 - (d) receiving input designating a region of interest within the region;wherein (b) comprises maintaining the acquisition scan plane position at the region of interest over time.
6. (original) The method of Claim 1 wherein (a) comprises tracking the motion within the region, the region being a three-dimensional volume, and wherein (b) comprises altering the acquisition scan plane position relative to the transducer, the transducer being a multi-dimensional array of elements, the alteration maintaining an acquisition scan plane at a region of interest within the three-dimensional volume over time.

7. (original) The method of Claim 6 further comprising:
 - (c) electronically steering acoustic energy across the acquisition scan plane;wherein (a), (b) and (c) are repeated.
8. (original) The method of Claim 6 wherein (a) comprises transmitting acoustic energy to at least three sub-regions of the three-dimensional volume without acquiring data for the entire three-dimensional volume.
9. (original) The method of Claim 8 further comprising:
 - (c) scanning a representative sample of the entire three-dimensional volume;wherein (a) comprises comparing data responsive to the acoustic energy transmitted to the at least three sub-regions with data responsive to the representative sample.
10. (original) The method of Claim 8 wherein (a) comprises:
 - (a1) transmitting at least three grouped sets of beams spaced apart within the three-dimensional volume;
 - (a2) determining a direction and a magnitude of motion from data responsive to the at least three grouped sets of beams for each of the at least three grouped sets of beams;wherein (b) comprises altering the acquisition scan plane position as a function of the at least three directions and at least three magnitudes.
11. (original) The method of Claim 1 wherein (b) comprises adaptively altering the acquisition scan plane position in response to the motion;
further comprising:
 - (c) repetitively scanning the adaptively positioned acquisition scan planes; and
 - (d) generating two-dimensional images responsive to (c).
12. (original) The method of Claim 11 further comprising:
 - (e) shifting the two-dimensional images as a function of an initial position of the region of interest.

13. (original) The method of Claim 1 further comprising:
(c) identifying at least one feature within the region;
wherein (a) comprises tracking motion of the at least one feature.
14. (original) The method of Claim 1 wherein (a) comprises tracking one of speckle and a spatial gradient.
15. (original) The method of Claim 1 further comprising:
(c) adjusting a tracking parameter for (a) as a function of a position of a tracking location within the region.
- 16-22. (cancelled)
23. (original) The method of Claim 1 further comprising:
(c) obtaining data for motion tracking in response to different acquisition parameters than used for imaging.
24. (original) The method of Claim 1 wherein (b) comprises automatically altering an acquisition volume position relative to a transducer as a function of the motion.
25. (new) The method of Claim 1 wherein (a) comprises tracking, with a processor, the motion from data representing at least a portion of the region acquired at different times.